and the methodology on which its virtual collocation floor space investment[97] and floor space direct costs[98] are based.

62. PRTC estimates that the number of square feet required to support the interconnector-designated termination equipment for 18 central offices varies between 600 square feet and 39,795 square feet. PRTC also estimates that the dollar amount of building investment required to support that equipment for these central offices varies between $217,607 and $6,373,459. PRTC uses these estimates to compute floor space direct costs for virtual collocation.[99] We require PRTC to explain and justify in detail the variance in the amount of floor space required and the investment value of that space for virtual collocation among its central offices. PRTC also must identify the interconnector-designated equipment that it assumes will occupy the floor space for which it develops direct costs and explain whether the assumed physical dimensions and characteristics of this equipment will vary among interconnectors and among central offices.

63. In developing the annual investment per square foot of central office space on which its floor space direct costs are based, PRTC multiplies building investment per square foot by a "common area percentage."[100] PRTC does not define the phrase "common area percentage." We therefore require PRTC to define "common area percentage." We also require PRTC to explain the development of and justify the use of this factor in defining that floor space investment. To the extent that, through this percentage, PRTC is recovering common area floor space costs as a direct cost in its virtual collocation rates, PRTC must explain why it considers such costs to be directly attributable to virtual collocation service under the pricing standard set forth in the *Virtual Collocation Order*,[101] rather than a cost that is common to all of its services and recoverable as an overhead cost. We direct PRTC to explain in specific terms how the floor space derived by applying the common area percentage would be used by interconnectors when they take virtual collocation service from PRTC.

64. PRTC develops floor space direct costs based on a sample composed of 18 central offices,[102] but provides tariffs for virtual collocation in only seven of its central

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[97] PRTC lists building investment, square footage, and common area percentage, but provides no explanation of how it derived these figures. *Id.* at Workpaper 5.

[98] PRTC lists recurring floor space direct capital costs and direct operating costs in its TRP for DS1/DS3 Entrance Function, but provides no explanation of how it derived these figures. *Id.*

[99] *Id.*

[100] *Id.*

[101] 9 FCC Rcd at 5187-88.

[102] *Id.*

offices[103] We require PRTC to explain and justify the use of these 18 central offices for calculating floor space direct costs, rather than using the seven central offices that are tariffed for virtual collocation. PRTC also must explain why some of the central offices at which virtual collocation is offered (*e.g.*, Baldiority and Levittown) are omitted from the sample of 18 central offices on which its floor space direct costs are developed.

C. Overhead Loading Factors

1. Background

65. Regulated physical collocation rates recover two types of costs: (1) direct costs; and (2) overhead costs. Direct costs are attributable to a particular service, such as physical collocation service. Overhead costs are joint and common costs that are not directly attributable to any particular service. An overhead loading is the dollar amount of the common and joint costs reflected in any particular rate. An overhead loading factor is the numerical value that yields the overhead cost or loading reflected in a rate when that factor is multiplied by the direct costs included in the same rate. For example, if a $135 rate recovers $100 of direct costs, the overhead costs included in that rate are $35, and the overhead loading factor is 1.35. The overhead loading factor also indicates the size of the overhead costs relative to the direct costs reflected in a rate. The overhead costs included in the rate in this example are 35 percent of the direct costs included in that rate.

66. In the *Special Access Expanded Interconnection Order*, the Commission required LECs to set their connection charge rate levels as the sum of the direct costs of providing expanded interconnection and a reasonable level of overhead loadings.[104] The Commission required the LECs to justify any deviations from uniform overhead loadings that they propose for connection charges.[105] The Commission stated that if LECs propose connection charges that reflect fully distributed cost overhead loadings, it would compare such loadings to the overhead loadings used for other services and require justification for any differences in overhead loadings.[106] The Commission reaffirmed this standard for physical and virtual collocation in the *Virtual Collocation Order*.[107] The Commission stated that LECs may not recover a greater share of overheads in charges for either physical or virtual collocation than they recover in charges for comparable services, absent justification.[108]

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[103] *Id.* at Description and Justification at 6.

[104] *Special Access Expanded Interconnection Order*, 7 FCC Rcd at 7429.

[105] *Id.*

[106] *Id.*

[107] 9 FCC Rcd at 5189.

[108] *Id.*

Moreover, the Commission stated that LECs have the burden of demonstrating that their connection charges meet this overhead loading standard and are otherwise just, reasonable, and not unreasonably discriminatory.[109] In the *Virtual Collocation Phase I Order*, the Commission concluded that most LECs had failed to demonstrate that their overhead loading levels, and consequently their virtual collocation rates, were just and reasonable. The Commission, therefore, found these rates unlawful and prescribed maximum permissible overhead loading levels in that Order.[110]

2. Pleadings

67. Parties to this proceeding commented on the overhead loading factors of Bell Atlantic and PRTC. No party, however, commented on Ameritech's overhead loading factor.[111] MCI, MFS, and Teleport argue that Bell Atlantic's overhead loading factors proposed in its tariff exceed those prescribed by the Commission for virtual collocation service in the *Virtual Collocation Phase I Order*.[112] Teleport argues that Bell Atlantic's overhead loadings are unjustified in light of its reduced DS1 and DS3 rates and its decreasing personnel costs.[113]

68. In its reply, Bell Atlantic asserts that the overhead loading factors reflected in its rates for physical and virtual collocation services are in accordance with the *Virtual Collocation Phase I Order*'s standard for judging the reasonableness of the overhead loadings LECs recover in their rates for virtual collocation services.[114] Bell Atlantic argues that the overhead loading factors reflected in its physical and virtual collocation term rates are consistent with this standard because these factors are the same as those reflected in its comparable DS1 and DS3 term rates.[115]

69. Centennial claims that PRTC's proposed overhead loading factors for its recurring rate elements are unreasonably high and in excess of the levels that the Commission

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[109] *Id.*

[110] *Virtual Collocation Phase I Order*, 10 FCC Rcd at 6376-77.

[111] Ameritech's overhead loading factor of 1.58 is the same as the overhead loading factor that the Commission approved, on an interim basis, in phase I of the virtual collocation investigation. *See Virtual Collocation Phase I Order*, 10 FCC Rcd at 6412.

[112] MCI Petition re: Bell Atlantic at 8-10; MFS Petition re: Bell Atlantic at 16-17; Teleport Petition at 6-7.

[113] Teleport Petition at 6.

[114] Bell Atlantic Reply at 4.

[115] *Id.*

prescribed for other LECs in its virtual collocation tariff investigation.[116] Specifically, Centennial argues that PRTC's overhead loading factors are excessive because they were calculated using incorrect "allocation ratios."[117]

70. In its reply, PRTC asserts that its overhead loadings for floor space do not exceed the overhead loadings applied to PRTC's special access service.[118]

3. Information Requirements

a. General

71. In order to evaluate the reasonableness of overhead amounts included in expanded interconnection rates, Bell Atlantic and PRTC must submit the overhead loading factor for each of their expanded interconnection service rate elements, fully explain and completely document the data, the methodologies, and the assumptions by which they derive these factors, and justify the reasonableness of the factors. These LECs must also submit the data they use to compute the factors, identify the sources from which they derive these data, and provide copies of all workpapers showing all calculations that underlie the development of these factors. Moreover, LECs must explain any variation in the overhead loading factors among expanded interconnection rate elements.

72. We further require Bell Atlantic and PRTC to submit separate overhead loading factors for each point-to-point DS1 and DS3 special and switched access service that they offer.[119] These services are those that LECs offer in two basic forms: (1) as a service providing channel termination without interoffice mileage,[120] connecting the customer premise and the nearest central office; and (2) as a service providing both channel termination and interoffice mileage,[121] connecting the customer to an additional central office.[122] These

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[116] Centennial Petition at 9.

[117] *Id.* at 11-13.

[118] PRTC Reply at 7-8.

[119] A point-to-point service provides a connection between the customer's premises (which, for an interexchange carrier (IXC), likely would be its point of presence) and another location (which may be another customer premises or a LEC central office). *See Virtual Collocation Phase I Order*, 10 FCC Rcd at 6379 n.22.

[120] For switched access service, for example, these LECs are required to submit the overhead loading factors reflected in the rates they impose on IXCs to recover the costs of entrance facilities, which are transmission facilities that carry interstate traffic between the IXC's point-of-presence (POP) and the LECs end office serving the POP (referred to as the serving wire center).

[121] For switched access service, for example, these LECs are required to submit the overhead loading factors reflected in the rates they impose on IXCs to recover the costs of entrance facilities and the costs of direct-trunked transport facilities, which are transmission facilities that carry interstate traffic between the serving wire center and

services also include generic[123] electrical or optical services, volume services,[124] term services,[125] volume and term services,[126] self-healing network services, and synchronous optical network services.[127] As support for their overhead factors, we require Bell Atlantic and PRTC to identify the unit investments, direct capital costs, the direct operating costs, and prices for these DS1 and DS3 services. In addition, these carriers must identify and explain the reasons for any differences between the methodologies used to develop the direct costs for these DS1 and DS3 services and those used to develop the direct costs for virtual collocation and physical collocation service. These LECs also should explain the basis for any difference in overheads: (1) among the various DS1 and DS3 services; and (2) between DS1 and DS3 services, on the one hand, and expanded interconnection services, on the other.

73. For a subset of these services, we also require that Bell Atlantic and PRTC fully explain and completely document all data, assumptions, and methodologies used to develop the unit investments, the direct capital costs, and the direct operating costs. We require this documentation for the point-to-point DS1 and DS3 special and switched access services with the lowest overhead loading factor. We also require this documentation for the largest volume point-to-point DS1 and DS3 special and switched access services with (1) the shortest term that is at least one year in length; (2) the longest term (*e.g.*, five years); and (3) the term that is intermediate to the shortest term and the longest term (*e.g.*, three years).[128] Bell Atlantic and PRTC must also submit a copy of all cost studies on which the unit investments, direct capital costs, direct operating costs, and overhead loading factors for these services are based.

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an end user's end office without passing that traffic through an intervening switch.

[122] *Virtual Collocation Phase I Order*, 10 FCC Rcd at 6379.

[123] For purposes of this Order, a generic service is a service other than a volume, term, volume and term, self-healing network, or synchronous optical network service. *See* nn.124-126 *infra*.

[124] A volume service is a service for which a buyer pays a particular rate to purchase a specific quantity of a seller's output (*e.g.*, 36 DS3s).

[125] A term service is a service for which a buyer pays a particular rate to purchase an unspecific quantity of a seller's output over a certain time (*e.g.*, five years).

[126] A volume and term service is a service for which a buyer pays a particular rate to purchase a specific quantity of a seller's output (*e.g.*, 36 DS3s) over a certain time (*e.g.*, five years).

[127] *Virtual Collocation Phase I Order*, 10 FCC Rcd at 6379.

[128] If a LEC offers an odd number of different terms (*e.g.*, one year, three years, and five years), the intermediate term is the middle term (*e.g.*, three years). If a LEC offers an even number of different terms (*e.g.*, one year, three years, five years, and seven years), the two middle terms are the intermediate terms (*e.g.*, three years and five years) and the LEC must submit the information required in this paragraph for each of these intermediate terms.

74. We require Bell Atlantic and PRTC to submit these direct cost data for services other than expanded interconnection because the difference between the rate and the direct cost included in that rate for these services is the overhead loading. In order to corroborate the validity of the overhead loading factors of these services, these LECs must demonstrate the accuracy of the direct costs they report for these services and, thereby, the accuracy of their reported overhead loading factors for these other services.

b. Bell Atlantic

75. Bell Atlantic proposes to recover different overhead loadings from its physical collocation and virtual collocation customers, depending upon whether these customers take service on a month-to-month basis, or under three-year or five-year term plans. In order to measure the potential significance of allowing Bell Atlantic to recover different overhead loadings, depending on the length of time over which the interconnectors take service, we require Bell Atlantic to indicate the percentage of the overall revenue it derives from DS1 and DS3 special and switched access services that is attributable to term pricing plans (TPP). Bell Atlantic must provide separate percentages for each TPP (*e.g.*, three-year, five-year).

76. We also require Bell Atlantic to state whether its proposed termination liabilities for three- and five-year DS1 and DS3 collocation interconnection TPPs are identical to those for three- and five-year DS1 and DS3 special and switched access service TPPs. We also require Bell Atlantic to identify and explain the reason for any differences between termination liabilities for collocation interconnection TPPs and special and switched access service TPPs.

c. PRTC

77. We require PRTC to indicate whether it includes any floor space costs in the direct costs that it derives for DS1 and DS3 special and switched access services. If PRTC does include any floor space costs in the direct costs for these services, PRTC must support its response to this question with workpapers showing the development of these direct costs for these services.

78. We also require PRTC to submit a detailed explanation and justification for the use of any allocation ratios used in developing the direct costs for the DS1 and DS3 services for which it is required to submit overhead loading factors. If it uses such ratios, PRTC must explain and document the data, assumptions, and the methodology by which these allocation ratios are developed.

D. Terms and Conditions

79. In order to ensure that interconnectors are able to compete with LECs in an efficient manner in the special and switched access markets, LECs must offer physical and virtual collocation arrangements under terms and conditions that are just, reasonable, and not

unreasonably discriminatory. Terms and conditions refer to tariffed provisions that define the rights and obligations of the parties in physical and virtual collocation arrangements. As a dominant facilities supplier to its interconnector-rivals, the LEC is in a unique position to impose terms and conditions that are restrictive, burdensome, and costly. LECs may be able to use discriminatory terms and conditions to increase the interconnector's cost of providing competing services and place the interconnector at an unfair competitive disadvantage. This would inhibit competition because it would frustrate interconnectors' ability to obtain physical and virtual collocation under terms and conditions that allow them to obtain efficient interconnection arrangements.

80. In earlier orders, we concluded that the terms and conditions in Ameritech's physical collocation tariff, PRTC's virtual collocation tariff, and Bell Atlantic's tariff for physical and virtual collocation warrant investigation.[129] As explained below, interconnectors argue that many of the provisions in these tariffs are unreasonable. We consider their petitions and the LECs' replies, and designate for investigation the reasonableness of certain terms and conditions these LECs established in their expanded interconnection tariffs.

1. Terms and Conditions Applicable to Both Physical Collocation and Virtual Collocation Service

a. Liability

i. Background

81. The tariffs of PRTC and Bell Atlantic state that they can be held liable for any physical damage to interconnector-designated equipment caused by these LECs' "negligence," and any interruption of the interconnectors' service or interference with the operation of the interconnectors' designated facilities caused by these LECs' "willful misconduct."[130] Under these tariffs, interconnectors must indemnify the LECs for: (1) any losses for damages to property and injury or death to persons that may be caused by the installation, maintenance, repair, replacement, presence, use, or removal of the interconnectors' designated equipment, or that may be caused by "any act or omission of the [LECs]" in connection with such equipment; and (2) any costs imposed on the LECs as a result of the interconnectors' presence in the central office.[131] These tariffs further state that certain provisions establishing a LEC right of action against the interconnectors shall survive the termination, cancellation, modification or rescission of the tariff arrangement for "at least" three years from the date of

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[129] *Ameritech Tariff Suspension Order*, 11 FCC Rcd at 10182; *PRTC Tariff Suspension Order*, 11 FCC Rcd at 9410; *Bell Atlantic Tariff Suspension Order* at ¶14.

[130] Bell Atlantic Tariff F.C.C. No. 1, § 19.3.7(A); PRTC Tariff F.C.C. No. 1, § 18.3.2(A).

[131] Bell Atlantic Tariff F.C.C. No. 1, §§ 19.3.7(B), 19.3.7(C); PRTC Tariff F.C.C. No. 1, §§ 18.3.2(B), 18.3.2(C).

termination.[132]

82. Ameritech's tariff limits that company's liability to the interconnector's actual direct damages for bodily injury or death and to reimbursement of the reasonable cost of repair or replacement of the customer's transmission equipment in the central office space. The tariff further states that Ameritech will not be liable to the interconnector for any consequential damages (including, without limitation, damages for harm to business, lost revenues, lost savings, or lost profits), even if Ameritech has acted with gross negligence.[133]

83. Ameritech's tariff requires the interconnector to indemnify Ameritech for claims and other liability. The indemnity provision covers any claims or other liability for injuries to persons or damages to property arising from the customer's use or occupancy of the central office space except for those acts resulting from Ameritech's sole negligence or willful misconduct.[134]

ii. Pleadings

84. MFS argues that the three-year survivability period in Bell Atlantic's liability provisions is unreasonable because Bell Atlantic should be able to identify any problems well in advance of three years by conducting inspections.[135] MFS also contends that this requirement is discriminatory, unless Bell Atlantic applies the same survivability period to vendors that work in Bell Atlantic's central offices.[136] .

85. MFS argues that Ameritech's limitation of liability section is unreasonable because it limits Ameritech's liability to the repair or replacement of the facilities. MFS argues that to discourage negligence by Ameritech's employees, interconnectors should be permitted to sue for compensation for time and business lost due to Ameritech's negligent damage of the collocator's premises.[137] Ameritech responds that it should not be liable for consequential damages because Ameritech derives a negligible economic benefit by offering physical collocation and would bear a substantial risk were it to permit interconnectors to

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[132] Bell Atlantic Tariff F.C.C. No. 1, §§ 19.3.7(B), 19.3.7(E); PRTC Tariff F.C.C. No. 1, §§ 18.3.2(B), 18.3.2(E).

[133] Ameritech Tariff F.C.C. No. 2, § 16.7.16.

[134] *Id.* at § 16.7.5.

[135] MFS Petition re: Bell Atlantic at 12-13.

[136] *Id.*

[137] MFS Petition re: Ameritech at 21-22.

seek consequential damages.[138] Moreover, Ameritech argues that interconnectors should purchase general commercial insurance policies to cover consequential damages.[139]

iii. Information Requirements

86. While the tariffs of Bell Atlantic and PRTC state that they can be held liable for (1) physical damage to interconnectors' equipment due to negligence, and (2) interruption or interference with the interconnectors' services due to willful misconduct,[140] these tariffs require interconnectors to indemnify LECs for any losses that "may arise out of or be caused by" the installation, maintenance, or repair of the interconnectors' designated equipment or any acts or omissions of these LECs in connection with such equipment, and for any costs imposed on these LECs "as a result of the interconnectors' presence in the central office."[141] We require PRTC and Bell Atlantic to explain why it is reasonable to impose on interconnectors a more stringent standard of care than the LECs establish for themselves. We also require these LECs to demonstrate the reasonableness of their tariff provisions requiring interconnectors to indemnify Bell Atlantic and PRTC for any of these LECs' "own acts or omissions" in connection with the installation, maintenance and repair of the collocators' equipment.

87. In addition, the tariffs of PRTC and Bell Atlantic contain provisions establishing a LEC right of action against an interconnector that would survive the termination of the collocation arrangement for a minimum time of three years and 18 months respectively, from the date of termination.[142] The tariff provisions that define the interconnectors' right of action against the LEC contain no similar survivability period. PRTC and Bell Atlantic must demonstrate the reasonableness of extending interconnectors' liability for an indeterminate period, with a minimum but not maximum time limitation, and explain why the minimum time periods they chose are reasonable. PRTC and Bell Atlantic also must explain why it is reasonable to permit certain rights of action these LECs have against the interconnectors, but not the interconnectors' rights of action against the LECs, to survive termination of interconnection service.

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[138] Ameritech Opposition at 16-17.

[139] *Id.*

[140] Bell Atlantic Tariff F.C.C. No. 1, § 19.3.7(A); PRTC Tariff F.C.C. No. 1, § 18.3.2(A).

[141] Bell Atlantic Tariff F.C.C. No. 1, §§ 19.3.7(B), 19.3.7(C); PRTC Tariff F.C.C. No. 1, §§ 18.3.2(B), 18.3.2(C).

[142] Bell Atlantic Tariff F.C.C. No. 1, §§ 19.3.7(B), 19.3.7(E); PRTC Tariff F.C.C. No. 1, §§ 18.3.2(B), 18.3.2(E). After MFS filed its petition in this proceeding, Bell Atlantic amended its tariff to provide that the interconnectors' liability will survive the termination of its tariff arrangement for at least 18 months from the date of termination, rather than three years. *See* Bell Atlantic Tariff F.C.C. No. 1, Transmittal No. 889 (filed July 11, 1996).

88. Under Ameritech's Tariff F.C.C. No. 2, Section 16.7.16, Ameritech limits its own liability to actual direct damages for bodily injury or death and reimbursement of reasonable cost of repair or replacement of equipment. In contrast, Ameritech's tariff requires each interconnector to indemnify Ameritech for any claims or other liability for injuries to persons or damages to property arising from the interconnector's use or occupancy of the central office space except for those acts resulting from Ameritech's sole negligence or willful misconduct.[143] We require Ameritech to explain and justify this lack of parity.

89. Ameritech requires interconnectors to indemnify Ameritech for claims arising from the interconnectors' use of the property in all cases except for those resulting from Ameritech's sole negligence or willful misconduct. This provision would appear to hold the interconnector liable for any joint acts that cause harm even if the interconnector is only 1% responsible and Ameritech is 99% responsible for the harm. Moreover, the interconnector appears to indemnify Ameritech for the acts of third parties arising from the interconnectors' use or occupancy of the collocation space without regard to the interconnector's control over the third party. Ameritech must justify the reasonableness of this provision.

b. Letters of Agency

i. Background

90. The tariffs of Bell Atlantic and Ameritech state that they will accept letters of agency (LOAs) from interconnectors' customers for ordering and billing purposes.[144] PRTC's tariff does not address this issue.

ii. Information Requirements

91. We require PRTC to state whether it will accept LOAs from interconnectors' customers for ordering and billing purposes. We also require PRTC to explain whether it accepts LOAs for its DS1 and DS3 special and switched access services and, if it does, to outline its procedures for accepting LOAs for its other DS1 and DS3 special and switched access services. If PRTC does not accept LOAs from interconnector-customers, we require PRTC to explain why it does not accept this practice. If PRTC accepts LOAs for special and switched access services, but does not accept LOAs from the customers of interconnectors, we also require PRTC to explain why this disparate treatment is reasonable.

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[143] Ameritech Tariff F.C.C. No. 2, § 16.7.5.

[144] *See* Ameritech Tariff F.C.C. No. 2, § 16.1.2(20); Bell Atlantic Tariff F.C.C. No. 1, § 19.3(Q).

2. Cage Construction Provisions for Physical Collocation Service

a. Background

92. Bell Atlantic's tariff provides that Bell Atlantic will construct a cage with a standard enclosure (no roof) or a non-standard enclosure (roof included) in order to secure the interconnectors' equipment.[145] The tariff states that Bell Atlantic may require the interconnector to order a non-standard enclosure to ensure Bell Atlantic's access to overhead structures for maintenance without the need for entry into the interconnector's collocation space.[146] Bell Atlantic's tariff states that it will require interconnectors to order a non-standard enclosure only "[i]n cases where there is no other Collocation Space available."[147]

b. Pleadings

93. MFS contends that Bell Atlantic should revise its tariff to state that a cage roof is to be utilized at the option of the collocator.[148]

c. Information Requirements

94. Bell Atlantic's tariff states that Bell Atlantic will charge an interconnector for a cage roof in cases where Bell Atlantic needs access to structures above the interconnector's space.[149] We require Bell Atlantic to justify charging any interconnectors for a cage roof in these cases, given that it would be Bell Atlantic's decision to place the interconnector's space near overhead structures. Moreover, assuming the Commission were to permit Bell Atlantic to recover any costs of cage roofs in interconnection tariffs, Bell Atlantic must explain whether it would be reasonable for the Commission to permit the carrier to recover such costs from *all* interconnectors with collocation arrangements at a central office, rather than recovering those costs from only those interconnectors that take the last available collocation spaces in that central office. In particular, Bell Atlantic must comment on whether it could reasonably recover the cost of cage roofs from all interconnectors with collocation arrangements at a central office by including the costs of an estimated number of cage roofs as a part of the average cost for all cages.

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[145] Bell Atlantic Tariff F.C.C. No. 1, § 19.4(A).

[146] *Id.*

[147] *Id.*

[148] MFS Petition re: Bell Atlantic at 9.

[149] Bell Atlantic Tariff F.C.C. No. 1, § 19.4(A).

3. Terms and Conditions for Virtual Collocation Service

a. Availability of Space for Virtual Collocation

i. Background

95. In the *Virtual Collocation Order*, the Commission stated that, in unusual circumstances, space may be so limited in particular central offices that virtual collocation is infeasible. The Commission noted that it would entertain requests for waiver of the requirement that virtual collocation be made available in such offices.[150]

96. PRTC's tariff states that virtual collocation arrangements will be available on a first-come, first-served basis, subject to the availability of space in the requested central office.[151] In determining the availability of space in the central office, PRTC states that it will reserve for itself space it requires to "meet its obligations to provide communications services."[152]

ii. Information Requirement

97. In light of the *Virtual Collocation Order*'s requirement that LECs obtain a waiver of the Commission's virtual collocation rules before denying a request for virtual collocation in a particular central office, we direct PRTC to explain why the Commission should not find unlawful the provisions in its tariff making its virtual collocation offering subject to the availability of space.

b. PRTC's Equipment Frame Layout Provision

i. Background

98. PRTC's tariff states that interconnectors have the responsibility to supply the transmission equipment necessary for virtual collocation service.[153] Under this provision, interconnectors must provide a description of the proposed equipment frame layout to PRTC before such equipment will be installed. PRTC will notify the interconnector within 30 days of the date it receives the description whether PRTC has accepted or rejected the equipment frame layout. If the layout is rejected, PRTC will provide an explanation of its reasons for

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[150] *Virtual Collocation Order*, 9 FCC Rcd at 5174.

[151] PRTC Tariff F.C.C. No. 1, § 18.3.

[152] *Id.*

[153] PRTC Tariff F.C.C. No. 1, § 18.3.

rejecting the layout.[154] The tariff also states that "should the customer fail to provide a description of the proposed equipment frame layout, the Telephone Company will specify the equipment frame layout."[155]

ii. Information Requirements

99. PRTC must explain what it means by a "description of the proposed equipment frame layout." PRTC also must specifically describe the information an interconnector would be required to provide to PRTC under this tariff provision and explain why this requirement is necessary for PRTC to be able to provide a virtual collocation arrangement. In addition, PRTC must explain why it requires interconnectors to propose an equipment frame layout, given that the equipment is to be located in PRTC's central offices and PRTC is, therefore, in the best position to determine the equipment layout that would serve the interests of both PRTC and interconnectors in a particular central office. We require PRTC to explain how interconnectors with little or no familiarity with PRTC's central office environment could develop equipment layout plans.

100. Under PRTC's equipment frame layout requirement, PRTC may consider a plan for 30 days before determining whether the plan is acceptable.[156] If PRTC rejects a plan, the interconnector apparently has two choices. First, the interconnector can develop another plan and then wait as long as 30 more days for PRTC's acceptance or rejection of the new plan. Second, it can inform PRTC that it will not be submitting a plan and then wait for PRTC to specify the equipment frame layout. PRTC must explain why the equipment frame layout requirement, the reasons for which are unclear, will not needlessly delay installation of virtual collocation equipment.

101. We note that the *Virtual Collocation Order* requires that virtual collocation equipment be installed under the same time intervals that apply to installation of comparable LEC equipment.[157] Accordingly, we require PRTC to identify the time intervals for installation of equipment that is used to provide DS1 and DS3 special and switched access services. We also require PRTC to explain how the delays apparently contemplated under its equipment frame layout provision are consistent with the requirement in the *Virtual Collocation Order* that interconnector equipment be installed under the same time intervals that apply to PRTC's equipment for comparable services.

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[154] *Id.*

[155] *Id.*

[156] *Id.*

[157] *Virtual Collocation Order*, 9 FCC Rcd at 5172.

c. Installation, Maintenance, and Repair of Interconnector-Designated Equipment by Outside Contractors

i. Background

102. In the *Virtual Collocation Order*, the Commission reaffirmed its conclusion that LECs are responsible for installing, maintaining, and repairing the central office equipment dedicated to the use of interconnectors.[158] The Commission further stated that LECs that permit outside contractors to enter their central offices to install, maintain, or repair LEC equipment must permit outside contractors to enter their central offices to perform these services for interconnector-designated equipment. The Commission noted that LECs may impose conditions, including certification and bonding requirements, on the contractors that provide service for interconnector-designated equipment, as long as these requirements are no more stringent than the requirements that the LECs impose on contractors that service the LECs' comparable equipment.[159]

103. PRTC's tariff states that interconnectors will select outside contractors to perform the "installation" of the interconnector-designated equipment from a list of PRTC-certified outside contractors.[160] The tariff does not permit interconnectors to select outside contractors to perform "maintenance and repair" of the interconnector's designated equipment from a list of PRTC-certified outside contractors.

ii. Information Requirements

104. PRTC's tariff permits interconnectors to select outside contractors to perform the "installation" of interconnector-designated transmission equipment, but not "maintenance and repair" of such equipment. We require PRTC to state whether it uses outside contractors to maintain and repair its own transmission equipment. If PRTC does use outside contractors to maintain and repair its own transmission equipment, PRTC must explain why its tariff does not permit interconnectors to select outside contractors to perform maintenance and repair of interconnector-designated equipment, as required in the *Virtual Collocation Order*. In addition, we require PRTC to state whether it will honor an interconnector's request that PRTC add contractors who meet PRTC's certification requirements to PRTC's approved contractor lists. In light of the Commission's requirements, if PRTC does not honor such requests, it must explain the reasons for its policies.

105. PRTC also must explain: (1) the criteria it will use to determine whether to certify an outside contractor to install, maintain, and repair interconnector-designated

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[158] *Id.*

[159] *Id.* at 5173.

[160] PRTC Tariff F.C.C. No. 1, § 18.3.

equipment; (2) the criteria it uses to certify outside contractors who install, maintain, and repair PRTC's other DS1 and DS3 special and switched access transmission equipment; and (3) whether any of the former requirements are more stringent than the latter.

d. Installation, Maintenance, and Repair Intervals

i. Background

106. In the *Virtual Collocation Order,* the Commission stated that when LECs install, maintain, and repair interconnector-designated equipment, they must, at a minimum, perform these functions under the same time intervals and with the same failure rates that apply to the performance of these functions for their own comparable equipment.[161] In the *Virtual Collocation Designation Order for Phase II*, we required LECs to discuss whether it would be reasonable to notify interconnectors of the LECs' specific maintenance and repair intervals by including appropriate language in their tariffs.[162] In particular, we ordered LECs to comment on whether it would benefit interconnectors, without being unduly burdensome to LECs, to state in their tariffs: (1) the frequency with which they will perform maintenance and repair of interconnector-designated equipment; (2) the maximum response time to intermittent service outages; and (3) the restoration priorities if a LEC's wire center is inoperative. [163]

107. PRTC's tariff states that it is responsible for maintaining all equipment within the central offices used to provide virtual collocation service to customers. PRTC's tariff states that the customer is responsible for monitoring the performance of all facilities and equipment used in the provision of virtual collocation service, and for initiating requests for maintenance of these facilities and equipment by PRTC.[164] PRTC will maintain the equipment "only upon request of the customer."[165]

ii. Information Requirements

108. PRTC must explain why its tariff does not state that PRTC will comply with the *Virtual Collocation Order*'s requirement that LECs install, maintain and repair interconnector-designated equipment under, at a minimum, the time intervals and failure rates

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[161] *Virtual Collocation Order*, 9 FCC Rcd at 5172.

[162] Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Virtual Collocation for Special Access and Switched Transport, CC Docket No. 94-97, Phase II, Order Designating Issues for Investigation, 10 FCC Rcd 11116, 11131 (1995).

[163] *Id.*

[164] PRTC Tariff F.C.C. No. 1, § 18.3.

[165] *Id.* at § 18.3.5.

that apply to LEC equipment for DS1 and DS3 special access and switched transport services. PRTC must also discuss why it would not be reasonable to inform interconnectors of PRTC's *specific* installation, maintenance and repair intervals by including appropriate language in its tariff. In particular, PRTC must comment on whether it would benefit interconnectors, without being unduly burdensome to PRTC, to state in its tariff: (1) the frequency with which it will perform maintenance and repair of interconnector-designated equipment; (2) the maximum response time to intermittent service outages; and (3) the restoration priorities if a PRTC wire center is inoperative.

109. PRTC also must explain whether it has any obligation under its tariff to monitor central office equipment and to notify interconnectors when maintenance and repair service is warranted. If it does not have such an obligation under its tariff, PRTC must explain why this is consistent with the Commission's virtual collocation requirements. We also seek comment from interconnectors on whether they can adequately monitor the operation of their equipment in the central office space without notification by PRTC of any maintenance problems.

IV. PROCEDURAL MATTERS

A. Filing Schedules

110. This investigation will be conducted as a notice and comment proceeding. We have designated CC Docket No. 96-160, CC Docket No. 96-165, and CC Docket No. 96-185 for this purpose. Ameritech Operating Companies, Bell Atlantic Telephone Companies, and the Puerto Rico Telephone Company are designated as parties to this proceeding. These parties shall file their direct cases no later than 30 days from the date this order is filed. The direct cases must present the parties' positions with respect to the issues described in this Order. Pleadings responding to the direct cases may be filed no later than 15 days after LECs file their direct cases, and must be captioned "Oppositions to Direct Case" or "Comments on Direct Case." The parties may each file a "Rebuttal" to oppositions or comments no later than seven days after the date the oppositions and comments are filed.

111. An original and six copies of all pleadings shall be filed with the Secretary of the Commission. In addition, parties shall file two copies of any such pleadings with the Competitive Pricing Division, Common Carrier Bureau, Room 518, 1919 M Street, N.W., Washington, D.C. 20554. Parties shall also deliver one copy of such pleadings to the Commission's commercial copying firm, International Transcription Service, 2100 M Street, N.W., Suite 140, Washington, D.C. 20037. Members of the general public who wish to express their views in an informal manner regarding the issues in this investigation may do so by submitting one copy of their comments to the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C. 20554. Such comments should specify the docket number of this investigation.

112. All relevant and timely pleadings will be considered by the Commission. In

reaching a decision, the Commission may take into account information and ideas not contained in pleadings, provided that such information or a writing containing the nature and source of such information is placed in the public file, and provided that the fact of reliance on such information is noted in the order.

B. *Ex Parte* Requirements

113. *Ex parte* contacts (*i.e.*, written or oral communications that address the procedural or substantive merits of the proceeding which are directed to any member, officer, or employee of the Commission who may reasonably be expected to be involved in the decisional process in this proceeding) are permitted in this proceeding until the commencement of the Sunshine Agenda period. The Sunshine Agenda period terminates when a final order is released and the final Order is issued. Written *ex parte* contacts and memoranda summarizing oral *ex parte* contacts must be filed on the day of the presentation with the Secretary and Commission employees receiving each presentation. For other requirements, *see generally* Section 1.1200 *et seq.* of the Commission's Rules, 47 C.F.R. §§ 1.1200 *et. seq.*

114. The information established in this Designation Order has been analyzed with respect to the provisions of the Paperwork Reduction Act of 1980, as amended by the Paperwork Reduction Act of 1995,[166] and found to impose no new or modified form, or information collection requirements on the public. Implementation of any new or modified requirements will be subject to approval by the Office of Management and Budget as prescribed by the Act.

V. ORDERING CLAUSES

115. **IT IS ORDERED** that, pursuant to Sections 4(i), 4(j), 201(b), 203(c), 204(a), 205, and 403 of the Communications Act, 47 U.S.C. §§ 154(i), 154(j), 201(b), 203(c), 204(a), 205, and 403, and Sections 0.91 and 0.291 of the Commission's rules, 47 C.F.R. §§ 0.91, 0.291, the issues set forth in this Order **ARE DESIGNATED FOR INVESTIGATION**.

116. **IT IS FURTHER ORDERED** that the local exchange carriers listed in Appendix A of this Order **SHALL BE** parties to this proceeding.

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[166] 44 U.S.C. §§ 3501-3520.

117. **IT IS FURTHER ORDERED** that each local exchange carrier that is a party to this proceeding **SHALL INCLUDE**, in its direct case, a response to each request for information that it is required to answer in this Order.

FEDERAL COMMUNICATIONS COMMISSION

Regina M. Keeney

Regina M. Keeney, Chief
Common Carrier Bureau

Appendix A

Instructions for Completing Tariff Review Plan Charts

1. Bell Atlantic must complete tariff review plan (TRP) charts for DS1, DS3, and short term DS3 physical collocation services and for DS1, DS3, and short term DS3 virtual collocation services.[1] Bell Atlantic must complete separate TRP charts for month-to-month, three-year term, and five-year term DS1 and DS3 physical collocation and virtual collocation services unless the direct costs for these services are equal. If the direct costs for these services are equal, Bell Atlantic must submit a statement with its TRP charts indicating that this is the case. Ameritech must complete TRP charts for DS1 and DS3 physical collocation services. PRTC must complete TRP charts for DS1 and DS3 virtual collocation services. There are five physical collocation charts and five virtual collocation charts. Sample physical collocation TRP charts are set forth in Appendix B. Sample virtual collocation TRP charts are set forth in Appendix C. Ameritech and Bell Atlantic are required to categorize physical collocation investment, direct cost, and price data into the 14 physical collocation functions that are identified separately on these charts.[2] Bell Atlantic and PRTC are required to categorize virtual collocation investment, direct cost, and price data into the seven virtual collocation functions[3] that are identified separately on these charts. Bell Atlantic, Ameritech, and PRTC must submit these data on these charts both in hard copy and on a computer disk in Lotus 1-2-3 format in accordance with the instructions set forth below. These LECs may obtain a computer disk containing a complete set of these charts in Lotus 1-2-3 format by contacting Carol Canteen of the Competitive Pricing Division at (202) 418-1540.

Chart I in Appendices B and C

2. Bell Atlantic and Ameritech are required to allocate the unit direct cost associated with each of their physical collocation rate elements among the 14 physical collocation functions listed on chart I in Appendix B, labeled "Physical Collocation Direct Costs Allocated into Functions." Bell Atlantic and PRTC must allocate the unit direct cost associated with each of their virtual collocation rate elements among the seven virtual collocation functions listed on chart I in Appendix C, labeled "Virtual Collocation Direct Costs Allocated into Functions." Instructions for completing these charts are set forth below.

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[1] Bell Atlantic must submit its short term DS3 physical collocation service data on charts that are formatted the same as those that we set forth in Appendix B for DS3 physical collocation service. Bell Atlantic must submit its short term DS3 virtual collocation service data on charts that are formatted the same as those that we set forth in Appendix C for DS3 virtual collocation service.

[2] For a description of these 14 physical collocation functions, *see* para. 30 *supra*.

[3] For a description of these seven virtual collocation functions, *see* 34 *supra*.

Physical Collocation Direct Costs Allocated into Functions in Appendix B

3. In column A on chart I for physical collocation, LECs must identify separately, by name, each physical collocation rate element.

4. In columns B - O on chart I for physical collocation, LECs must allocate, into the 14 physical collocation functions, the unit direct cost associated with each physical collocation rate element identified in column A on chart I.

5. In column P on chart I for physical collocation, LECs must indicate the total unit direct cost for each physical collocation rate element identified in column A on chart I. LECs must calculate this amount by adding the allocated unit direct costs for all physical collocation functions into which the unit direct cost for each physical collocation rate element is allocated.

Virtual Collocation Direct Costs Allocated into Functions in Appendix C

6. In column A on chart I for virtual collocation, LECs must identify separately, by name, each virtual collocation rate element.

7. In columns B - H on chart I for virtual collocation, LECs must allocate, into the seven virtual collocation functions, the unit direct cost associated with each virtual collocation rate element identified in column A on chart I.

8. In column I on chart I for virtual collocation, LECs must indicate the total unit direct cost for each virtual collocation rate element identified in column A on chart I. LECs must calculate this amount by adding the allocated unit direct costs for all virtual collocation functions into which the unit direct cost for each virtual collocation rate element is allocated.

Chart II in Appendices B and C

9. Bell Atlantic and Ameritech must allocate the unit rate associated with each of their physical collocation rate elements among the 14 physical collocation functions on chart II in Appendix B, labeled "Physical Collocation Rates Allocated into Functions." Bell Atlantic and PRTC must allocate the unit rate associated with each of their virtual collocation rate elements among the seven virtual collocation functions on chart II in Appendix C, labeled "Virtual Collocation Rates Allocated into Functions."

Physical Collocation Rates Allocated into Functions in Appendix B

10. In column A on chart II for physical collocation, LECs must identify separately, by name, each physical collocation rate element.

11. In columns B - O on chart II for physical collocation, LECs must allocate, into the 14 physical collocation functions, the unit rate associated with each physical collocation rate element identified in column A on chart II.

12. In column P on chart II for physical collocation, LECs must indicate the total unit rate for each physical collocation rate element identified in column A on chart II. LECs must calculate this amount by adding the allocated unit rates for all physical collocation functions into which the unit rate for each physical collocation rate element is allocated.

Virtual Collocation Rates Allocated into Functions in Appendix C

13. In column A on chart II for virtual collocation, LECs must identify separately, by name, each virtual collocation rate element.

14. In columns B - H on chart II for virtual collocation, LECs must allocate, into the seven virtual collocation functions, the unit rate associated with each virtual collocation rate element identified in column A on chart II.

15. In column I on chart I for virtual collocation, LECs must indicate the total unit rate for each virtual collocation rate element identified in column A on chart II. LECs must calculate this amount by adding the allocated unit rates for all virtual collocation functions into which the unit rate for each virtual collocation rate element is allocated.

Chart III in Appendices B and C

16. Bell Atlantic and Ameritech must submit on chart III, labeled "Physical Collocation Investment," physical collocation investment data separately for each of the 14 physical collocation functions. In Appendix B, sample TRP physical collocation investment charts are set forth for the DS1 entrance facility installation function and the DS1 active security function. LECs must complete physical collocation investment charts for the 14 physical collocation functions for both DS1 and DS3 physical collocation services using the format illustrated on the charts in Appendix B for the DS1 entrance facility installation and DS1 active security functions. Bell Atlantic and PRTC must submit on chart III, labeled "Virtual Collocation Investment," virtual collocation investment data separately for each of the seven virtual collocation functions. In Appendix C, sample virtual collocation investment TRP charts are set forth for the DS1 provisioning function and the DS1 technician training function. LECs must complete virtual collocation investment charts for the seven virtual collocation functions for both DS1 and DS3 virtual collocation services using the format illustrated in Appendix C for the DS1 provisioning and DS1 technician training functions.

17. These instructions are for both physical collocation investment data on Chart III in Appendix B and for virtual collocation investment data on Chart III in Appendix C. Although the functions identified on the physical and virtual collocation charts differ to reflect differences between physical and virtual collocation services, LECs are required to

provide the same type of investment data for physical collocation functions as for virtual collocation functions, and the charts on which they are required to submit these data are uniform for these two services. Accordingly, the instructions for completing these charts are also uniform. Given this uniformity, we refer to "collocation functions" rather than to "physical collocation functions" or "virtual collocation functions" in the instructions for completing these charts that follow.

18. In column A on chart III, LECs must first identify separately, by name, each recurring rate element and each nonrecurring rate element associated with any investment item required to provide the collocation function listed at the top of each page on chart III.[4] LECs must then identify separately, by name, each investment item required to provide the collocation function listed at the top of each page insofar as each investment item is associated with that rate element in column A on chart III. LECs must list these separate investment items immediately below the particular recurring or nonrecurring rate element associated with these items.[5] Jumpers, regenerator cables, regenerators, DSX cables, fiber optic termination shelves, fiber optic termination plugs, point of termination bays, DSX panels, power distribution bay breakers, power cable, coaxial cable, cable racks, land, and building are examples of investment items that each LEC must identify separately on its own row, by name, in column A on chart III. In cases where LECs develop a nonrecurring rate that recovers the entire capital outlay for collocation assets up front, LECs must treat these assets as investment items for purposes of completing this chart. The capital outlay associated with these assets may not be booked to the LEC's asset account or recovered as the assets depreciate over time when these assets are identified under a nonrecurring rate element for which the LEC develops a rate that recovers the capital outlay.

19. In Column B on chart III, for each collocation function, LECs must indicate the unit investment amount associated with each investment item identified in column A on chart III. Unit investment is exclusive of any loadings for installation and engineering.

20. In column C on chart III, for each collocation function, LECs must indicate the number of hours required to install each investment item identified in column A on chart III.

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[4] Space is provided in column A on Chart III to list the names of as many as three recurring and three nonrecurring rate elements for each collocation function. If the costs for a collocation function are associated with more than three recurring rate elements or more than three nonrecurring rate elements, then LECs must modify chart III by adding additional rows and must list the names of additional rate elements on these additional rows.

[5] For each collocation function, space is provided in column A on Chart III to list the names of as many as five investment items under each recurring and each nonrecurring rate element. If more than five investment items are associated with a single recurring or nonrecurring rate element, then LECs must modify chart III by adding additional rows below the rate element associated with the additional investment items and must list the names of the additional investment items on these additional rows.

21. In column D on chart III, for each collocation function, LECs must indicate the direct installation cost per hour, exclusive of any overhead loading, that is incurred to install each investment item identified in column A on chart III.

22. In column E on chart III, for each collocation function, LECs must indicate the number of engineering hours required to make operational each investment item identified in column A on chart III.

23. In column F on chart III, for each collocation function, LECs must indicate the direct engineering cost per hour, exclusive of any overhead loading, that is incurred to make operational each investment item identified in column A on chart III.

24. In column G on chart III for each collocation function, LECs must indicate the installed unit investment amount. LECs must calculate this amount by adding: (1) the number in column B on chart III; (2) the number obtained by multiplying the number in column C on chart III by the number in column D on chart III; and (3) the number obtained by multiplying the number in column E on chart III by the number in column F on chart III.[6]

25. In column H on chart III, for each collocation function, LECs must indicate the unit capacity for each investment item identified in column A on chart III. For example, if a DSX-1 cross-connect shelf that has a capacity of 56 DS1s is an investment item that the LEC identifies in column A on chart III, for the cross-connection equipment function, the LEC must enter for this investment item the number 56 in column H on chart III, for the cross-connection equipment function.

26. In column I on chart III, for each collocation function, LECs must indicate the fill factor, which is the percentage rate of utilization, used to develop unit capacity investment for each investment item identified in column A on chart III.

27. In column J on chart III, for each collocation function, LECs must indicate the unit capacity investment amount for each investment item identified in column A on chart III. LECs must calculate this amount by: (1) dividing the number in column B on chart III by the number in column H on chart III; and (2) dividing the result of the division in (1) by the number in column I on chart III.

28. On rows 7, 15, 23, 31, 39, and 47 in column J on chart III, for each collocation function, LECs must indicate separately the total unit capacity investment amount for each rate element identified in column A on chart III. LECs must calculate this amount by adding the unit capacity investment amounts in column J on chart III for the investment items identified under each rate element in column A on chart III.

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[6] If this installed unit investment amount includes loadings other than for installation and engineering, LECs must modify this chart by adding columns between column F and column G, and must display the dollar amount of these other loadings in these additional columns.

29. In column K on chart III, for each collocation function, LECs must indicate the installation investment amount per unit for each investment item identified in column A on chart III. LECs must calculate this amount by: (1) multiplying the number in column C on chart III by the number in column D on chart III; (2) dividing the result of the multiplication in (1) by the number in column H on chart III; and (3) dividing the result of the division in (2) by the number in column I on chart III.

30. On rows 7, 15, 23, 31, 39, and 47 in column K on chart III, for each collocation function, LECs must indicate separately the total installation per unit amount for each rate element identified in column A on chart III. LECs must calculate this amount by adding the installation per unit amounts in column K on chart III for the investment items identified under each rate element in column A on chart III.

31. In column L on chart III, for each collocation function, LECs must indicate the engineering investment amount per unit for each investment item identified in column A on chart III. LECs must calculate this amount by: (1) multiplying the number in column E on chart III by the number in column F on chart III; (2) dividing the result of the multiplication in (1) by the number in column H on chart III; and (3) dividing the result of the division in (2) by the number in column I on chart III.

32. On rows 7, 15, 23, 31, 39, and 47 in column L on chart III, for each collocation function, LECs must indicate separately the total engineering per unit amount for each rate element identified in column A on chart III. LECs must calculate this amount by adding the engineering per unit amounts in column L on chart III for the investment items identified under each rate element in column A on chart III.

33. In column M on chart III, for each collocation function, LECs must indicate the installed unit capacity investment amount for each investment item identified in column A on chart III. LECs must calculate this number by: (1) dividing the number in column G on chart III by the number in column H on chart III; and (2) dividing the result of the division in (1) by the number in column I on chart III.

34. On rows 7, 15, 23, 31, 39, and 47 in column M on chart III, for each collocation function, LECs must indicate separately the total installed unit capacity investment amount for each rate element identified in column A on chart III. LECs must calculate this amount by adding the installed unit capacity investment amounts in column M on chart III for the investment items identified under each rate element in column A on chart III.

35. In column N on chart III, for each collocation function, LECs must indicate the number of investment items required to provide one unit of service for each investment item identified in column A on chart III. For example, if a DSX-1 cross-connect shelf is an investment item that is identified in column A on chart III, and one DSX-1 cross-connect

shelf is required to provide one DS1 cross-connection, LECs must enter the number 1 in column N on chart III for this item under the cross-connection equipment function.

36. In column O on chart III, for each collocation function, LECs must indicate the total installed unit capacity investment amount for each investment item identified in column A on chart III. LECs must calculate this amount by multiplying the number in column M on chart III by the number in column N on chart III.

37. On rows 7, 15, 23, 31, 39, and 47 in column O on chart III, for each collocation function, LECs must indicate the aggregate of the total installed unit capacity investment amount separately for each rate element identified in column A on chart III. LECs must calculate this amount by adding the total installed unit capacity investment amounts in column O on chart III for the investment items identified under each rate element in column A on chart III.

Chart IV in Appendices B and C

38. Bell Atlantic and Ameritech must submit on chart IV, labeled "Physical Collocation Direct Costs," physical collocation direct cost data separately for each of the 14 physical collocation functions. In Appendix B, sample TRP physical collocation direct cost charts are set forth for the DS1 entrance facility installation function and the DS1 active security function. LECs must complete physical collocation direct cost charts for the 14 physical collocation functions for both DS1 and DS3 physical collocation services using the format illustrated on the charts in Appendix B for the DS1 entrance facility installation and DS1 active security functions. Bell Atlantic and PRTC must submit on chart IV, labeled "Virtual Collocation Direct Costs," virtual collocation direct cost data separately for each of the seven virtual collocation functions. In Appendix C, sample virtual collocation direct cost TRP charts are set forth for the DS1 provisioning function and the DS1 technician training function. LECs must complete virtual collocation direct cost charts for the seven virtual collocation functions for both DS1 and DS3 virtual collocation services using the format illustrated in Appendix C for the DS1 provisioning and DS1 technician training functions.

39. The functions identified on the physical and virtual collocation charts differ to reflect differences between physical and virtual collocation services. However, LECs are required to provide the same type of direct cost data for physical collocation functions as for virtual collocation functions and the charts on which they are required to submit these data are uniform for these two services. Accordingly, the instructions for completing these charts are also uniform. Given this uniformity, we refer to "collocation functions" rather than to "physical collocation functions" or "virtual collocation functions" in the instructions for completing these charts that follow.